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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 10
1200 Sixth Avenue
Seattle, Washington 98101

February 18, 1999

Mr. Kevin O'Neill
U.S. Department of Energy
Idaho Operations Office
850 Energy Drive
Idaho Falls, Idaho 83401

RE: Revised Comments on the Draft Final Remedial Investigation/Feasibility Study for Waste Area Group 5, Operable Unit 5-12, at INEEL

Dear Kevin:

Enclosed are our revised hydrogeological comments on the Draft Final RI/FS based on our discussion on the conference of February 10, 1999. Let's discuss and resolve any outstanding issues related to these comments at your earliest convenience.

Sincerely,

Keith A. Rose
INEEL WAG Manager

Enclosure
cc: Scott Reno, IDEQ

GENERAL HYDROGEOLOGY COMMENTS AND RESPONSE TO PROPOSED RESOLUTIONS

GF's initial review covered five sections of this report associated with the hydrogeology of the site, including Sections 2.0, 3.0, 4.3, 5.0 and Appendix J. What follows are GF's comments on the third round of LIMITCO's resolutions in response to the second round of EPA's comments on the second set of resolutions to the original comments on the OU 5-12 RI/FS.

1. Resolution partially accepted. The (a) additional information included in the revised hydrologic description of the site provides more details and presents a more accurate description of the conditions at the site.

The additional information provided on February 10, 1999 between EPA and LMITCO and Parsons Infrastructure Group, that an analysis of sludge from the pond was used to estimate the risk associated with the liquid discharge ponds at WAG 5, resolves GF's concern over using the analytical results from a surficial soil risk factor associated with the liquid discharge ponds at WAG 5. The sludge should provide an indication of the presence of most contaminants potentially present in the liquids discharged to the pond.

The statement that the "...consequences for underestimating the mass for WAG 5 ...are probably not significant." can neither be substantiated or refuted at this time. Averaging the interbed thickness may not reflect an upper bound value for the vadose zone transmissivity.

The text on Page 5-6, Section 5.3.1, Second Paragraph, Last Sentence, refers to these infiltration structures as "evaporation ponds". They were originally described as seepage pits or infiltration lagoons. This portion of the text should be amended to provide a consistent and accurate description of these infiltration structures.

RESPONSE TO RESOLUTIONS FOR SPECIFIC COMMENTS

GF's review covered five sections related to the hydrogeologic conditions of this site, including Sections 2.0, 3.0, 4.3, 5.0 and Appendix J.

1. **Section 2, Hydrology and Section 4, Nature and Extent of Contamination.** Resolution rejected.

> The statement that the ground water monitoring system "... is adequate.....because WAG 5 operations primarily generated surface contamination not groundwater contamination." is not backed up any evidence that the ground water monitoring system is effective. LIMITCO's assumption that past disposal activities that include infiltration ponds and lagoons has not affected ground water quality needs to be substantiated with additional ground water quality data.
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> In the teleconference of February 10, 1999 between EPA and LMITCO and Parsons Infrastructure Group, the current monitoring system was described as including the SPERT 2 and ARA Mon 2 well locations. These wells appear to be approximately downgradient of, and but fairly close to, the potential source areas. The screened depths of these wells and past analytical results should be considered in evaluating

these wells as appropriate downgradient locations. Additional down gradient locations may be required to assess the impact of the entire PBF and ARA on regional ground water quality.

2. **Section 2.2.4.2, Page 2- 20, First Paragraph.** Resolution accepted.

3. **Section 2.2.4.2, Page 2-20, First Paragraph.** Resolution accepted.

4. **Section 2.2.4.2, Page 2-20, Third Paragraph.** Resolution accepted.

5. **Section 3.0.** Resolution accepted. The new information on how the sludge was used to estimate the data on the source at the infiltration ponds most likely provide a reasonable estimate of the liquids discharged at this facility.

   (b) Resolution accepted.

6. **Figure 4-40.** Resolution accepted.

7. **Section 4.3, Page 4-51, Groundwater Nature and Extent of Contamination.** Resolution accepted.

8. **Section 4.3, Page 4-51, Groundwater Nature and Extent of Contamination.** Resolution accepted.

9. **Section 5.0, Page 5-1, First Paragraph.**

10. **Section 5.** Response noted.

11. **Section 5.1, Page 5-2, First Bullet.** Response noted.

12. **Appendix J, Page 13.** Response noted.